

Many POS terminals handle credit card or debit card payments and thus also include a magstripe reader. Some have fingerprint readers (discussed in the next section) that read your fingerprint, which is linked to a payment method such as a checking account or credit card. After swiping your card through the reader or reading your fingerprint, the POS terminal connects to a system that authenticates the purchase. Once the transaction is approved, the terminal prints a receipt for the customer.

A self-service POS terminal allows consumers to perform all checkout-related activities (Figure 5-40). That is, they scan the items, bag the items, and pay for the items themselves. Consumers with small orders find the self-service POS terminals convenient because these terminals often eliminate the hassle of waiting in long lines.



FIGURE 5-40 Many grocery stores offer self-serve checkouts, where the consumers themselves use the POS terminals to scan purchases, scan their store saver card and coupons, and then pay for the goods.

Automated Teller Machines

An **automated teller machine (ATM)** is a self-service banking machine that connects to a host computer through a network (Figure 5-41). Banks place ATMs in convenient locations, including grocery stores, convenience stores, retail outlets, shopping malls, and gas stations, so that customers conveniently can access their bank accounts.

Using an ATM, people withdraw cash, deposit money, transfer funds, or inquire about an account balance. Some ATMs have a touch screen; others have special buttons or keypads for entering input. To access a bank account, you insert a plastic bankcard in the ATM's magstripe reader. The ATM asks you to enter a password,

called a *personal identification number (PIN)*, which verifies that you are the holder of the bankcard. When your transaction is complete, the ATM prints a receipt for your records.



FIGURE 5-41 An ATM is a self-service banking terminal that allows customers to access their bank accounts.

BIOMETRIC INPUT

Biometrics is the technology of authenticating a person's identity by verifying a personal characteristic. Biometric devices grant users access to programs, systems, or rooms by analyzing some biometric identifier. A *biometric identifier* is a physiological (related to physical or chemical activities in the body) or behavioral characteristic. Examples include fingerprints, hand geometry, facial features, voice, signatures, and eye patterns.

A *biometric device* translates a personal characteristic (the input) into a digital code that is compared with a digital code stored in the computer. If the digital code in the computer does not match the personal characteristic's code, the computer denies access to the individual.

The most widely used biometric device today is a fingerprint reader. A **fingerprint reader**, or